a re-education by immobilization of movements and by the movements of immobilization. The author believes that the outlook in this case is favorable.

3. *Infantile Myxedema.*—A case of a young girl eighteen years of age who presented a typical picture of infantile myxedema. In addition to these symptoms there were to be seen on various parts of the body the double pigmentation characteristic of Recklinghausen's disease. On the upper external aspect of the thigh on the left there was a large nevus which presented the appearance of a keloid. A good photograph illustrates the article.

4. *Radial Hemimelia.*—A description illustrated by a radiograph of a case of radial hemimelia of the left extremity involving principally the first phalanx of the thumb and complicated by an atrophy of the thenar eminence of the right hand.

5. *Tongue in Epileptic.*—A description of a congenital malformation of the tongue which was found in a case of periodic insanity. The tongue presented a very curious morphological appearance on the superior surface consisting chiefly in the abnormal character and position of the fissures and lines. The article is illustrated by a very remarkable photograph.

6. *Arthropathy and Resection.*—On account of the rarity of surgical treatment of the arthropathies the report of this case is of value. Man thirty-four years old with a history of syphilis had a mal-perforant which healed. An arthropathy of the right tibio-tarsal articulation developed with trophic changes. The case was one of early tabes with the spinal symptoms as yet little developed. A resection of the tibial plane without anesthesia and ablation of the astragalus was carried out. The foot was then immobilized. There was a good result both from a functional and an orthopedic point of view. SCHWAB (St. Louis).

NEUROLOGISCHES CENTRALBLATT

(Vol. 22, 1903, No. 7, April.)

1. Monochromatopsia and Color-blindness. W. ALTER.
2. The Cause of Acromegaly. E. SCHÄFFER.
3. The symptomatology of Peripheral Facial Palsies. M. ROSENFELD.

1. *Monochromatopsia.*—Alter records an interesting case of a thirty-four-year-old patient suffering from general paresis, who suddenly saw everything in green color. This lasted for thirty minutes. Eye examination next day showed a left-sided hemiachromatopsia, but normal color perception. Several similar attacks came on shortly afterwards but after two of these attacks there was also total loss of color perception, which soon disappeared. There were no accompanying cerebral symptoms of any kind during these attacks. Alter then discusses the various theories explaining these symptoms and agrees with those of Kenowski.

2. *Acromegaly.*—Schäffer records a case of acromegaly with some peculiar symptoms. Woman, fifty-one. Mother died of diabetes, and for 4-5 years before death had the same symptoms of enlargement of head, face, hands and feet that the daughter has. The symptoms of patient date back seven years; has symptoms of diabetes with sugar in urine and polyuria. Enlargement of bones noticed five years ago. Has severe pains, especially in back, arms and legs. Other symptoms those of ordinary acromegaly. Eye examination shows bilateral entoptic contraction of visual fields, more on left side, and atrophy of the optic nerves, especially on temporal side not so marked in the left eye. Schäffer explains these symptoms by a basal tumor involving the hypophysis cerebri and pressing upon the optic chiasm. A radiogram of the hand accompanies article.

3. *Facial paralysis.*—Rosenfeld records six cases of peripheral facial

palsy in which he calls attention to the following, assuming the cases to be left-sided: (1) Right-sided closure of eye possible. No movement of other eyelid. (2) Isolated closing of eyelid, paralyzed side more or less impossible. (3) Bilateral closure of eyelids possible. (4) Inability to close the eyelid alone, in facial palsies which here recurred. This might be of value in differentiating between hysterical facial palsy.

(Vol. 22, 1903, No. 8, April 16.)

1. Specific Autocyto-toxine and Antiauto-cyto-toxine in the Blood of Epileptics. Preliminary Contribution. C. CENI.
2. Further Contributions to the Dietetic Treatment of Epileptics. R. BALINT.
3. Clinical Contributions to the Cause of the Disturbance of Consciousness. SORGE.
4. The Functions of the Caudate Nucleus. W. STRIDA.

1. *Blood of Epileptics.*—Ceni immunized rabbits against the serum of epileptics, and then injected the blood serum of these animals into epileptics. It was shown that this blood serum had both a local and a general effect even in small doses as 0.5 c.cm. The local effect consisted in a redness and swelling at the place of injection which lasted for some days. The general effect was one of acute poisoning, a rise of temperature to 39 degrees C., and a mental confusion like that of status epilepticus with convulsions, which lasted several days. These results resembled what was obtained by injecting the blood serum of one epileptic into another epileptic, but were not nearly as constant. Injection of normal serum of rabbits into the blood of epileptics produced no change. Serum of rabbits injected with the normal blood serum of man produced in the blood of epileptics certain toxic symptoms as are found in cytotoxic serum. He also injected into the blood of non-epileptics blood serum of rabbits immunized against the serum of epileptics and that injected with the serum of normal persons, and obtained negative results. As a result of these observations he observes that the serum of epileptics, injected into rabbits, is able, through a reaction of its organisms, to produce a substance which has a toxic, and on an epileptic, a specific action. These results also show that there is a specific toxic substance in the blood of epileptics, a autocyto-toxine, which is produced in the organism by the same mechanism as the cyto-toxine. Ceni then discusses the physiology of these experiments and comes to the following conclusion. That in the blood of epileptics together with a specific autocyto-toxin there inculcates also an anti-autocyto-toxin. This antitoxic principle is not free in the living plasma, but is found in the blood in a latent condition, and is dependent in the cellular elements of the blood from which it is obtained by a pleagolytic process.

2. *Dietetic Treatment of Epileptics.*—Balint, to determine the results obtained by a longer dietetic treatment of epileptics, treated a series of six and five patients for periods lasting from five months to one and one-half years. A diet of milk, butter, eggs, fruit and bread in which bromides were substituted for salt, was given. In the first series the number and intensity of the convulsions were reduced 78 per cent. It was difficult to keep up the treatment, as the patients' appetites grew poor on account of the sameness of diet, which had to be changed. The general nutrition was good. Brominism resulted in some cases, but this can be avoided by changing the diet. The treatment is recommended for further trial.

3. *Disturbances of Consciousness.*—Sorge records a case of hystero-epilepsy with rather interesting disturbance of consciousness.

4. *Function of the Caudate Nucleus.*—Stieda, to determine the function of the caudate nucleus experimented on dogs. Two to three weeks

before the operation, the motor cortex was removed so as to produce a secondary degeneration of the motor fibers in the internal capsule. This was done so as to avoid irritation of these fibers when the current was applied. The caudate nucleus was exposed to the eye by cutting into the lateral ventricle. The blood pressure, respiration curve, and the amount of pressure in the bladder were carefully registered. The irritation was produced by an electric current. The results were as follows: Irritation of the caudate nucleus, when the whole motor cortex was removed, produced no muscular twitchings. If the rim of the cortex was only removed, associated eye movements were obtained, but if the surface of the posterior central convolution was also removed, these movements were absent. The blood pressure was heightened and respiration became slow and deep. Stieda thinks that the change in respiration is a reflex process and that the blood pressure curve is a result of this. The bladder contractions were increased, especially so if the optic thalamus, in the central gray matter surrounding the 3d ventricle, was irritated, on which it probably depends. No temperature changes were noticed. The function of the caudate nucleus is still unknown.

(Vol. 22, 1903, No. 9, May 1.)

1. A Contribution to the Question of Peripheral Origin of Sensory Fibers in Mammals. G. Bikeles and M. Franke.
2. Chronic Anterior Poliomyelitis and Syringomyelia. G. Rossolimo.
3. A Contribution Regarding the Influences on Physiological Irritability. R. Levi.

1. *Peripheral Origin of Sensory Fibers in Mammals.*—To determine the question whether spinal sensory nerve fibers had their origin in the periphery in man as is contended by some writers, especially Pierre Marie, the authors decided to resect certain nerves in the anterior and posterior extremities of different animals. They used guinea pigs, rabbits, cats and dogs. In the guinea pigs and rabbits, the median, ulnar, radial and sciatic nerves were examined, and in the cats and dogs only the sciatic nerve was taken. In these nerves one and one-half to 2 cm. long pieces were resected and the animals were allowed to live from eight to thirteen days. In the examination pieces of the nerves were taken farthest away from the seat of injury, so that traumatic reaction could be excluded. The central nerve fibers were examined mostly by the Marchi method, and only very few sections were stained in combination with the Azonlay stain, while the peripheral part of the nerves after being prepared by the Marchi method were stained by the Azonlay stain. Serial longitudinal sections were cut. In all the peripheral portion of the nerves of every animal degenerated fibers were found. No nerve was normal, nor was the degeneration equal. In the central portion of the nerves no degeneration could be found. As a result of these experiments, Bikeles and Franke conclude that the hypothesis that sensory nerve fibers have an origin in the periphery in mammals, is without ground, and that in man the sensory spinal nerve fibers do *not* have their origin from cells in the skin, tendons or aponeurosis.

2. *Chronic Anterior Poliomyelitis and Syringomyelia.*—Rossolimo reports a very interesting case of chronic anterior poliomyelitis and syringomyelia. Two other similar cases are on record. The patient, thirty-five years; family and past histories are negative. He first complained of a dull aching pain in his left shoulder, followed soon after by a weakness in the whole left arm, muscular twitchings and beginning atrophy. This process gradually progressed, involving the left lower extremity, then the right lower extremity and finally the right arm. There is contracture of the right hand. Power is greatly diminished in all extremities. No sclerosis. Atrophy is generally marked, especially in shoulders and distal extremi-

ties. Electrical excitability is greatly diminished. The patellar reflexes are exaggerated, Achillis jerks reenforceable, the right biceps and triceps reflexes normal, the left diminished, the abdominal, cremaster and plantar reflexes are weak. Bladder and bowel functions are normal. Sensation normal except that there is diminution of pain sense in the terminal phalanges of the three last fingers of the left hand. Muscle sense normal, and there is cyanosis of the hand and foot and hyperidrosis. Pain on pressure over nerve trunk. Man died without change of symptoms. Postmortem and microscopical examination was made, which showed a cavity in the central part of the spinal cord beginning in the 2d cervical segment and ending in the 4th dorsal segment. The cavity attained its largest dimension opposite the 3d cervical segment and was more towards the left side, involving from the anterior commissure, to the anterior part of the posterior bundles. The cells of the anterior horns of the spinal cord were greatly diminished in number, in varying degrees of atrophy; there was a small cell infiltration around the blood vessels, increased amount of glia substance and spindle cells in the gray matter of the anterior horns, while the anterior nerve roots, peripheral nerves and muscles showed simple atrophic changes. The posterior roots and tracts were normal. The author then discusses the case and thinks that there was here two distinct and separate processes. He reviews the literature of the other cases of chronic anterior poliomyelitis reported, and calls attention to the fact that in these cases the cells in the lateral aspect of the anterior horns of the spinal cords are spared, and that the atrophy follows the distribution of the anterior spinal artery, especially its branch in the sulci.

3. *Physiological Irritability.*—The irritability of muscles can be influenced in three ways: by work, massage and electricity. Mann was one of the first to study systematically the manner in which the irritability was altered by a faradic current, using an induction current of different strength and duration. He came to the following conclusions: 1. Very weak currents, whose strength was below the power of producing contraction, and continued for several minutes, did not alter the faradic irritability. 2. Stronger currents, which produce contraction of a muscle, diminish the irritability depending upon the intensity and length of application. 3. Regularly applied faradism will after several days produce a heightening of the irritability of the faradized muscle or nerve. Levi confirms these experimental findings, but his results were very inconsistent. He endeavors to explain this. The resistance of the skin, the apparent difference in different prisms, some responding quicker than others, the tension of the muscles, the temperature, the apparent difference in the nature of the muscles, and the difficulty in exactly localizing the nerve or muscular points, most probably caused the inconsistency of the findings.

(Vol. 22, 1903, No. 10, May 16.)

1. Observations on Ascending Degenerated Fibers in the Pyramidal Tracts and Remarks upon Judging of Marchi Preparations. K. Petrén.
2. Psychosis in Pernicious Anemia. H. Marcus.
3. A Case of Primary Tonic Facial Spasm with Muscle Quivering. L. Newmark.

1. *Ascending Degenerated Fibers in the Pyramidal Tract.*—Petrén, in a case of traumatic transverse lesion of the 1st dorsal segment of the spinal cord traced ascending degenerated fibers as far as the pons where the examination ended. The Marchi method was employed. The degeneration was equally intense, more so, however, in the lateral than the an-

terior pyramidal tracts. Similar observations have been recorded by others. In the whole region of the pyramidal tract numerous abundant black granules were found which were more numerous at the motor decussation in the medulla where the fibers were cut obliquely. These black granules represent intensely degenerated fibers, which in a longitudinal section are more easily to be made out than in cross sections. Thick cross sections do not show as many of these grounds.

2. *Psychosis in Pernicious Anemia.*—The patient was thirty-seven years old with good past history. Without decided anemia, there was a change in his disposition, he became irritable, wrote long letters and made exorbitant purchases and had ideas of grandeur. As his anemia became more pronounced, the patient became depressed and somnolent. The anemia gradually disappeared and his mental condition correspondingly improved.

3. *Primary Tonic Facial Spasm.*—Newmark records a very interesting case of a twenty-three-year-old medical student who had a right-sided spasm in the distribution of the facial nerve. The whole side of the face was sharply drawn to the right. Besides there was a quiver of the muscles of the right side of face including the platysma myoides. This was constant and was not so pronounced in the supraorbital distribution. There was no paresis or paralysis of the seventh nerve, and no hysterical stigmata. Newmark thinks this is a similar case to the one Bernhardt reported. WEISENBURG (Philadelphia).

ALLGEMEINE ZEITSCHRIFT FUER PSYCHIATRIE

(Vol. 60, 1903, Part 4.)

1. Pathology of Reading and Writing. G. WOLFF.
2. Cerebral Atrophy and Cerebellar Atrophy. TH. BRUDER.
3. Dementia Præcox. A. BERNSTEIN.
4. General Paresis. G. SCHÄFER.
5. Treatment of General Paresis. J. DONATH.
6. Hysterical Symptoms in Organic Brain Lesions. E. THOMA.
7. Chemical Constitution of the Brain. F. N. SCHULZ.
8. Mycosis Fungoides and Insanity. G. SIPOCZ.
9. Statistical Studies.

1. *The Pathology of Reading and Writing.*—The author calls attention to the necessity of including an inquiry as to the former attainments, in reading and writing, when investigating cases presenting disturbances of these faculties. He gives histories of three cases in which, with ability to speak, and to copy written or printed words, and sentences, there was inability to read or to comprehend the latter, and to write from dictation. These patients were all found to be of low intelligence, and close inquiry proved that, while they had learned to write, and to copy mechanically, they had never learned to read. All of these cases presented mental disturbances, and in one of them motor aphasia had followed an injury to the head. In this case, after trephining, the speech disturbance improved, while the inability to read persisted. A fourth case, that of a woman, thirty-two years old, suspected of being syphilitic, and having surely cardiac and renal disease, after a right hemiplegia, presented the following peculiar disturbances. While there was no motor aphasia, what was said to her was understood, and she could name correctly objects exhibited to her, she had almost entirely lost her vocabulary for spontaneous speech, and had the greatest difficulty in finding the proper substantives for answering a question. A certain number of words she could still read, when either written or printed, but a far greater number could not be read at all; others, again, she read incorrectly. Placing these words in